Supplementary data

Table S1. Mechanisms of colistin resistance, carbapenemase content and MICs of ceftazidime-avibactam, aztreonam and combination of ceftazidime/avibactam + aztreonam of the colistin-resistant and carbapenemase-producing *K. pneumoniae* isolates.

			MICs (mg/L)		
Isolates	**Resistance mechanisms to colistin**	**Carbapenemase**	**CZA**	**ATM**	**CZA+ATM**
11 I8	IS*5* between +74 and +75 of *mgrB* gene	KPC-3	6	-	-
20 C9	IS*5* between +74 and +75 of *mgrB* gene	KPC-3	2	-	-
13.45	IS*Kpn26*-like between +74 and +75 of *mgrB* gene	KPC-2	1.5	-	-
16.72	Full deletion of *mgrB* gene	KPC-2	1.5	-	-
21.43	Premature termination of MgrB	KPC-2	1	-	-
C1	IS*10R* into *mgrB* promotor between -26 and -27	KPC-2	1.5	-	-
C3	T157P substitution in PmrB	KPC-3	1	-	-
C7	G183V substitution in CrrB	KPC-2	0.75	-	-
C9	IS*5* between +74 and +75 of *mgrB* gene	KPC-2	1.5	-	-
C11	Premature termination of MgrB	KPC-2	1.5	-	-
T1b	IS*5* between +74 and +75 of *mgrB* gene	KPC-2	1	-	-
12 E2	N42Y and K43I substitutions in MgrB	OXA-48	0.5	-	-
15.72	G53S substitution in PmrA	OXA-48	0.5	-	-
12.32	IS*1R* into *mgrB* promotor between -45 and -46	OXA-48	1	-	-
14.5	Deletion of one nucleotide in *mgrB* at position 74	OXA-48	0.5	-	-
14.22	Deletion of one nucleotide in *mgrB* at position 23	OXA-48	2	-	-
15.20	IS*1R* between +21 and +22 of *mgrB* gene	OXA-48	0.38	-	-
16.43	IS*5*-like between +74 and +75 of *mgrB* gene	OXA-48	0.12	-	-
18.5	IS*1R* into *mgrB* promotor between -45 and -46	OXA-48	0.75	-	-
18.60	Full deletion of *mgrB* gene	OXA-48	0.5	-	-
19.3	IS*Kpn14*-like into *mgrB* promotor between -45 and -46	OXA-48	1.5	-	-
20.10	Duplication of 19 nt between +84 and +85 of *mgrB* gene	OXA-48	0.19	-	-
20.16	IS*102*-like between +36 and +37 of *mgrB* gene	OXA-48	0.25	-	-
21.19	M27K substitution in MgrB	OXA-48	1.5	-	-
22.53	IS1R into *mgrB* promotor between -61 and -62	OXA-48	1	-	-
22.76	Premature termination of MgrB	OXA-48	0.38	-	-
Af47	Full deletion of *mgrB* gene	OXA-48	0.75	-	-
T2	T157P substitution in PmrB	OXA-48	1.5	-	-
T7	L17Q substitution in PmrB	OXA-48	0.5	-	-
T153	IS*2* between +64 and +65 of *mgrB* gene	OXA-48	0.75	-	-
T163	IS*2* between +44 and +45 of *mgrB* gene	OXA-48	0.75	-	-
T166	IS*1R* between +123 and +124 of *mgrB* gene	OXA-48	1	-	-
T167	IS*Kpn14* between +77 and +78 of *mgrB* gene	OXA-48	0.5	-	-
T191	T157P substitution in PmrB	OXA-48	0.12	-	-
T232	Premature termination of MgrB	OXA-48	0.75	-	-
T286	W47R substitution in MgrB	OXA-48	0.75	-	-
T65	IS*1R* into *mgrB* promotor between -45 and -46	OXA-48	1.5	-	-
T82	T157P substitution in PmrB	OXA-48	3	-	-
T83	IS*1R* between +44 and +45 of *mgrB* gene	OXA-48	2	-	-
T101	R16C substitution in PhoQ	OXA-48	3	-	-
T104	IS1R between +44 and +45 of *mgrB* gene	OXA-48	3	-	-
T106	IS*Kpn14* into *mgrB* promotor between -28 and -29	OXA-48	0.38	-	-
T332A	IS*Kpn14* into *mgrB* promotor between -28 and -29	OXA-48	0.75	-	-
Af18	Deletion of one nucleotide in *mgrB* at position 70	OXA-181	1.5	-	-
Af39	IS*903B* between +76 and +77 of *mgrB* gene	OXA-181	0.75	-	-
Af44	P151L substitution in CrrB	OXA-181	0.25	-	-

Af53	Unknown	OXA-181	0.38	-	-
Af54	Full deletion of *mgrB* gene	OXA-181	1	-	-
VOLb	IS*1R* between +118 and +119 of *mgrB* gene	NDM	>256	6	1
5241	Full deletion of *mgrB* gene	NDM	>256	24	0.25
LECL	IS*903B* between +69 and +70 of *mgrB* gene	NDM	>256	>256	0.25
Af25	Premature termination of MgrB	NDM	>256	64	0.19
Af37	G53S substitution in PmrA	NDM	>256	>256	2
Af43	Deletion of 10 nt between +48 and +57 of *mgrB* gene	NDM	>256	0.19	0.12
T335	W20R substitution in MgrB	NDM	>256	>256	0.094
T346	Deletion 11 nt between +22 and +32 of *mgrB* gene	NDM	>256	>256	0.5
14.36	IS*1R* into *mgrB* promotor between -36 and -37	OXA-48+NDM	>256	>256	1.5
T4	IS*903B* between +69 and +70 of *mgrB* gene	OXA-48+NDM	>256	>256	0.38
T5	IS*Kpn14* into *mgrB* promotor between -27 and -28	OXA-48+NDM	>256	>256	0.25
T105	T157P substitution in PmrB	OXA-48+NDM	>256	>256	0.38
T111	IS*Kpn26*-like between +74 and +75 of *mgrB* gene	OXA-48+NDM	>256	>256	0.38
T113	T157P substitution in PmrB	OXA-48+NDM	>256	>256	0.38
Af56	Premature termination of MgrB	OXA-181+NDM	>256	>256	0.5

MIC, Minimum Inhibitory Concentrations ; CZA, Ceftazidime/avibactam; ATM, Aztreonam